

TU-Note Violin Sample Library

Package Insert

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Abstract: The presented sample library of violin sounds is designed as a tool for the research, development and testing of sound analysis / synthesis algorithms. The library features single sounds which cover the entire frequency range of the instrument in four dynamic levels, two-note sequences for the study of note transitions, and solo pieces and scales. All parts come with hand-labeled segmentation ground-truth files which mark attack, release and transition/transient segments. Additional relevant information on the samples' properties is provided for single sounds and two-note sequences. Recordings took place in an anechoic chamber with a professional violinist and a recording engineer, using two microphone positions. This document briefly describes the content and structure of the data set.

1. Content Description

The TU-Note library of violin sounds consists of three parts:

1. single sounds
2. two-note sequences
3. solo: pieces and scales

1.1. Single sounds

The 336 single sounds stem from different positions on each string, in 4 different dynamic levels. The file `File_Lists/list_Single.txt`, which is also included in Section A of the Appendix, features the complete file list in tab-separated format with the relevant features of each item (string, position, MIDI note value, ISO-Pitch, dynamic label, precalculated F_0 in relation to 443 Hz). The assignment of single sounds to MIDI note values is listed in `File_Lists/sample-assignment.txt`, as well as in Section B of the Appendix.

1.2. Two-note sequences

A total of 344 two-note sequences utilizing different intervals, dynamics and articulation styles was recorded. All two-note items are listed in `File_Lists/list_TwoNote.txt` with additional information and also included in Section B of the Appendix.

1.3. Solo: pieces and scales

The solo section includes six scales and six solo pieces. Two scales were each played in three interpretation styles, as listed in Table 1. Six solo pieces and excerpts, listed in Table 2 which mostly contain cantabile legato passages were proposed by the violinist.

Table 1: Scales in the solo part

Solo Item	Type	Interpretation
01	major, ascending	plain
02	major, ascending	expressive 1
03	major, ascending	expressive 2
04	minor, descending	plain
05	minor, descending	expressive 1
06	minor, descending	expressive 2

Table 2: Compositions in the solo part

Solo Item	Composition	Composer
07	Sonata in A major for Violin and Piano	César Franck
08	Violin Concerto in E minor, Op. 64, 2nd movement	Felix Mendelssohn
09	Méditation (Thaïs)	Jules Massenet
10	Chaconne in g minor	Tomaso Antonio Vitali
11	Violin Concerto in E minor, Op. 64, 3rd movement	Felix Mendelssohn
12	Violin Sonata No.5, Op.24, 1st movement	Ludwig van Beethoven

2. Recording Setup

Recording took place in the anechoic chamber at SIM¹, Berlin and was conducted over two days.

2.1. Microphones

The following microphones were used:

- 1x DPA 4099 cardioid microphone
- 1x Brüel & Kjær 4006 omnidirectional small diaphragm microphone with free-field equalisation (hereafter BuK)

Format

All material was captured with a sample-rate of 96 kHz and a depth of 24 Bit. The included WAV files are truncated from the original recordings based on the segmentation files.

¹www.sim.spk-berlin.de

3. Data Structure

Each item in the database comes with a WAV file and a tab-separated text file containing segmentation. Content information is included in additional text files. Within the compressed file TU-Note_Violin.zip, the data is arranged as listed in Fig. 1.

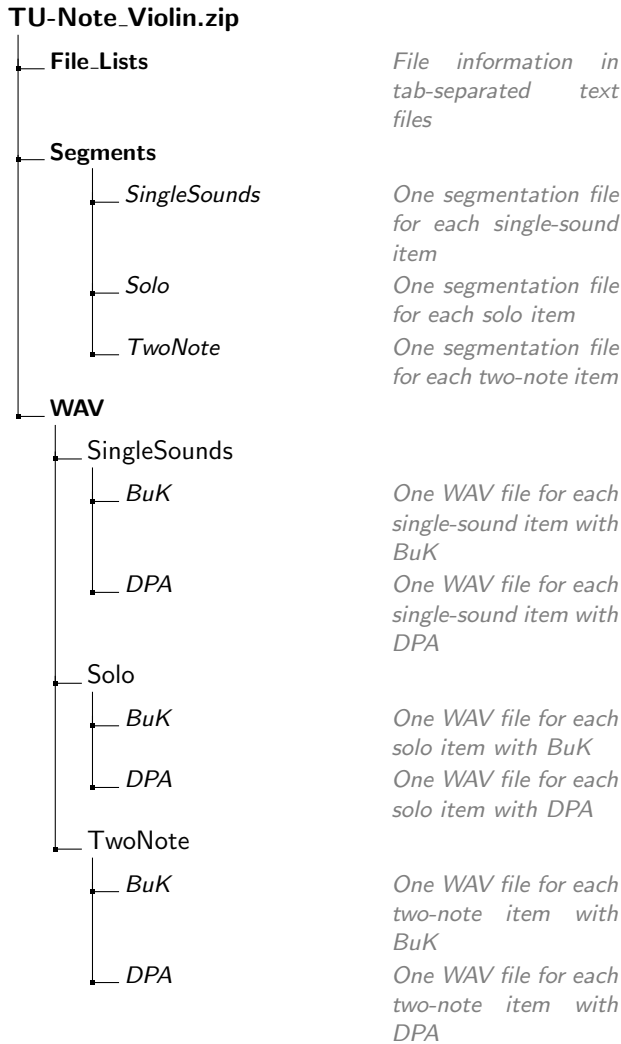


Figure 1: Directory tree for the data in the archive TU-Note_Violin.zip

4. Segmentation

Segmentation was performed using the DPA microphone recordings and related files are thus named accordingly. Since delay differences are negligible, these segmentations are valid for the BuK recordings, as well.

4.1. Single sounds

All single sounds are labeled with four points, as shown in Table 3 with A, marking the beginning of the attack; C, marking the end of the attack and thus the beginning of the sustain; D, marking the end of the sustain and respectively the beginning of the release and B, marking the end of the release. A and B also mark the files' beginning and end and are thus redundant. The left column contains the related time instants in seconds.

Table 3: Example for a single-sound segmentation file (SampLib_DPA_01.txt)

0.000000	A
0.940646	C
7.373000	D
8.730500	B

4.2. Two-note sequences

All segmentation files for all two-note sequences are structured as shown in Table 4. They contain the segments *Note* (1) – representing the steady-state part of a tone, *Rest* (0) – representing a silent part and *Transition* (2) – representing transient and unsteady portions, such as attack, release or note transitions, including glissandi. The left column contains the related time instants in seconds.

Table 4: Example for a two-note segmentation file (TwoNote_DPA_08.txt)

0.000000	0
0.170667	2
0.447667	1
3.390927	2
3.522094	1
6.920135	2
7.934958	0

4.3. Solo

Solo passages are labeled in the same manner as two-note sequences, but without a leading rest segment.

Acknowledgements

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A. list_Single.txt

File	String	Pos	MIDI	ISO	Dyn	Octave	Hz
SampLib.DPA_01	G	0	55	G3	pp	1	197.33
SampLib.DPA_02	G	0	55	G3	mp	1	197.33
SampLib.DPA_03	G	0	55	G3	mf	1	197.33
SampLib.DPA_04	G	0	55	G3	ff	1	197.33
SampLib.DPA_05	G	1	56	G#3	pp	1	209.07
SampLib.DPA_06	G	1	56	G#3	mp	1	209.07
SampLib.DPA_07	G	1	56	G#3	mf	1	209.07
SampLib.DPA_08	G	1	56	G#3	ff	1	209.07
SampLib.DPA_09	G	2	57	A3	pp	1	221.5
SampLib.DPA_10	G	2	57	A3	mp	1	221.5
SampLib.DPA_11	G	2	57	A3	mf	1	221.5
SampLib.DPA_12	G	2	57	A3	ff	1	221.5
SampLib.DPA_13	G	3	58	A#3	pp	1	234.67
SampLib.DPA_14	G	3	58	A#3	mp	1	234.67
SampLib.DPA_15	G	3	58	A#3	mf	1	234.67
SampLib.DPA_16	G	3	58	A#3	ff	1	234.67
SampLib.DPA_17	G	4	59	B3	pp	2	248.63
SampLib.DPA_18	G	4	59	B3	mp	2	248.63
SampLib.DPA_19	G	4	59	B3	mf	2	248.63
SampLib.DPA_20	G	4	59	B3	ff	2	248.63
SampLib.DPA_21	G	5	60	C4	pp	2	263.41
SampLib.DPA_22	G	5	60	C4	mp	2	263.41
SampLib.DPA_23	G	5	60	C4	mf	2	263.41
SampLib.DPA_24	G	5	60	C4	ff	2	263.41
SampLib.DPA_25	G	6	61	C#4	pp	2	279.07
SampLib.DPA_26	G	6	61	C#4	mp	2	279.07
SampLib.DPA_27	G	6	61	C#4	mf	2	279.07
SampLib.DPA_28	G	6	61	C#4	ff	2	279.07
SampLib.DPA_29	G	7	62	D4	pp	2	295.67
SampLib.DPA_30	G	7	62	D4	mp	2	295.67
SampLib.DPA_31	G	7	62	D4	mf	2	295.67
SampLib.DPA_32	G	7	62	D4	ff	2	295.67
SampLib.DPA_33	G	8	63	D#4	pp	2	313.25
SampLib.DPA_34	G	8	63	D#4	mp	2	313.25
SampLib.DPA_35	G	8	63	D#4	mf	2	313.25
SampLib.DPA_36	G	8	63	D#4	ff	2	313.25
SampLib.DPA_37	G	9	64	E4	pp	2	331.88
SampLib.DPA_38	G	9	64	E4	mp	2	331.88
SampLib.DPA_39	G	9	64	E4	mf	2	331.88
SampLib.DPA_40	G	9	64	E4	ff	2	331.88
SampLib.DPA_41	G	10	65	F4	pp	2	351.61
SampLib.DPA_42	G	10	65	F4	mp	2	351.61
SampLib.DPA_43	G	10	65	F4	mf	2	351.61
SampLib.DPA_44	G	10	65	F4	ff	2	351.61
SampLib.DPA_45	G	11	66	F#4	pp	2	372.52
SampLib.DPA_46	G	11	66	F#4	mp	2	372.52
SampLib.DPA_47	G	11	66	F#4	mf	2	372.52
SampLib.DPA_48	G	11	66	F#4	ff	2	372.52
SampLib.DPA_49	G	12	67	G4	pp	2	394.67
SampLib.DPA_50	G	12	67	G4	mp	2	394.67
SampLib.DPA_51	G	12	67	G4	mf	2	394.67
SampLib.DPA_52	G	12	67	G4	ff	2	394.67
SampLib.DPA_53	G	13	68	G#4	pp	2	418.14
SampLib.DPA_54	G	13	68	G#4	mp	2	418.14
SampLib.DPA_55	G	13	68	G#4	mf	2	418.14
SampLib.DPA_56	G	13	68	G#4	ff	2	418.14
SampLib.DPA_57	G	14	69	A4	pp	2	443
SampLib.DPA_58	G	14	69	A4	mp	2	443
SampLib.DPA_59	G	14	69	A4	mf	2	443

SampLib.DPA_60	G	14	69	A4	ff	2	443
SampLib.DPA_61	G	15	70	A#4	pp	3	469.34
SampLib.DPA_62	G	15	70	A#4	mp	3	469.34
SampLib.DPA_63	G	15	70	A#4	mf	3	469.34
SampLib.DPA_64	G	15	70	A#4	ff	3	469.34
SampLib.DPA_65	G	16	71	B4	pp	3	497.25
SampLib.DPA_66	G	16	71	B4	mp	3	497.25
SampLib.DPA_67	G	16	71	B4	mf	3	497.25
SampLib.DPA_68	G	16	71	B4	ff	3	497.25
SampLib.DPA_69	G	17	72	C5	pp	3	526.82
SampLib.DPA_70	G	17	72	C5	mp	3	526.82
SampLib.DPA_71	G	17	72	C5	mf	3	526.82
SampLib.DPA_72	G	17	72	C5	ff	3	526.82
SampLib.DPA_73	D	0	62	D4	pp	2	295.67
SampLib.DPA_74	D	0	62	D4	mp	2	295.67
SampLib.DPA_75	D	0	62	D4	mf	2	295.67
SampLib.DPA_76	D	0	62	D4	ff	2	295.67
SampLib.DPA_77	D	1	63	D#4	pp	2	313.25
SampLib.DPA_78	D	1	63	D#4	mp	2	313.25
SampLib.DPA_79	D	1	63	D#4	mf	2	313.25
SampLib.DPA_80	D	1	63	D#4	ff	2	313.25
SampLib.DPA_81	D	2	64	E4	pp	2	331.88
SampLib.DPA_82	D	2	64	E4	mp	2	331.88
SampLib.DPA_83	D	2	64	E4	mf	2	331.88
SampLib.DPA_84	D	2	64	E4	ff	2	331.88
SampLib.DPA_85	D	3	65	F4	pp	3	351.61
SampLib.DPA_86	D	3	65	F4	mp	3	351.61
SampLib.DPA_87	D	3	65	F4	mf	3	351.61
SampLib.DPA_88	D	3	65	F4	ff	3	351.61
SampLib.DPA_89	D	4	66	F#4	pp	3	372.52
SampLib.DPA_90	D	4	66	F#4	mp	3	372.52
SampLib.DPA_91	D	4	66	F#4	mf	3	372.52
SampLib.DPA_92	D	4	66	F#4	ff	3	372.52
SampLib.DPA_93	D	5	67	G4	pp	3	394.67
SampLib.DPA_94	D	5	67	G4	mp	3	394.67
SampLib.DPA_95	D	5	67	G4	mf	3	394.67
SampLib.DPA_96	D	5	67	G4	ff	3	394.67
SampLib.DPA_97	D	6	68	G#4	pp	3	418.14
SampLib.DPA_98	D	6	68	G#4	mp	3	418.14
SampLib.DPA_99	D	6	68	G#4	mf	3	418.14
SampLib.DPA_100	D	6	68	G#4	ff	3	418.14
SampLib.DPA_101	D	7	69	A4	pp	3	443
SampLib.DPA_102	D	7	69	A4	mp	3	443
SampLib.DPA_103	D	7	69	A4	mf	3	443
SampLib.DPA_104	D	7	69	A4	ff	3	443
SampLib.DPA_105	D	8	70	A#4	pp	3	469.34
SampLib.DPA_106	D	8	70	A#4	mp	3	469.34
SampLib.DPA_107	D	8	70	A#4	mf	3	469.34
SampLib.DPA_108	D	8	70	A#4	ff	3	469.34
SampLib.DPA_109	D	9	71	B4	pp	3	497.25
SampLib.DPA_110	D	9	71	B4	mp	3	497.25
SampLib.DPA_111	D	9	71	B4	mf	3	497.25
SampLib.DPA_112	D	9	71	B4	ff	3	497.25
SampLib.DPA_113	D	10	72	C5	pp	3	526.82
SampLib.DPA_114	D	10	72	C5	mp	3	526.82
SampLib.DPA_115	D	10	72	C5	mf	3	526.82
SampLib.DPA_116	D	10	72	C5	ff	3	526.82
SampLib.DPA_117	D	11	73	C#5	pp	3	558.15
SampLib.DPA_118	D	11	73	C#5	mp	3	558.15
SampLib.DPA_119	D	11	73	C#5	mf	3	558.15
SampLib.DPA_120	D	11	73	C#5	ff	3	558.15
SampLib.DPA_121	D	12	74	D5	pp	3	591.33

SampLib.DPA_122	D	12	74	D5	mp	3	591.33
SampLib.DPA_123	D	12	74	D5	mf	3	591.33
SampLib.DPA_124	D	12	74	D5	ff	3	591.33
SampLib.DPA_125	D	13	75	D#5	pp	3	626.5
SampLib.DPA_126	D	13	75	D#5	mp	3	626.5
SampLib.DPA_127	D	13	75	D#5	mf	3	626.5
SampLib.DPA_128	D	13	75	D#5	ff	3	626.5
SampLib.DPA_129	D	14	76	E5	pp	4	663.75
SampLib.DPA_130	D	14	76	E5	mp	4	663.75
SampLib.DPA_131	D	14	76	E5	mf	4	663.75
SampLib.DPA_132	D	14	76	E5	ff	4	663.75
SampLib.DPA_133	D	15	77	F5	pp	4	703.22
SampLib.DPA_134	D	15	77	F5	mp	4	703.22
SampLib.DPA_135	D	15	77	F5	mf	4	703.22
SampLib.DPA_136	D	15	77	F5	ff	4	703.22
SampLib.DPA_137	D	16	78	F#5	pp	4	745.03
SampLib.DPA_138	D	16	78	F#5	mp	4	745.03
SampLib.DPA_139	D	16	78	F#5	mf	4	745.03
SampLib.DPA_140	D	16	78	F#5	ff	4	745.03
SampLib.DPA_141	D	17	79	G5	pp	4	789.34
SampLib.DPA_142	D	17	79	G5	mp	4	789.34
SampLib.DPA_143	D	17	79	G5	mf	4	789.34
SampLib.DPA_144	D	17	79	G5	ff	4	789.34
SampLib.DPA_145	A	0	69	A4	pp	3	443
SampLib.DPA_146	A	0	69	A4	mp	3	443
SampLib.DPA_147	A	0	69	A4	mf	3	443
SampLib.DPA_148	A	0	69	A4	ff	3	443
SampLib.DPA_149	A	1	70	A#4	pp	3	469.34
SampLib.DPA_150	A	1	70	A#4	mp	3	469.34
SampLib.DPA_151	A	1	70	A#4	mf	3	469.34
SampLib.DPA_152	A	1	70	A#4	ff	3	469.34
SampLib.DPA_153	A	2	71	B4	pp	4	497.25
SampLib.DPA_154	A	2	71	B4	mp	4	497.25
SampLib.DPA_155	A	2	71	B4	mf	4	497.25
SampLib.DPA_156	A	2	71	B4	ff	4	497.25
SampLib.DPA_157	A	3	72	C5	pp	4	526.82
SampLib.DPA_158	A	3	72	C5	mp	4	526.82
SampLib.DPA_159	A	3	72	C5	mf	4	526.82
SampLib.DPA_160	A	3	72	C5	ff	4	526.82
SampLib.DPA_161	A	4	73	C#5	pp	4	558.15
SampLib.DPA_162	A	4	73	C#5	mp	4	558.15
SampLib.DPA_163	A	4	73	C#5	mf	4	558.15
SampLib.DPA_164	A	4	73	C#5	ff	4	558.15
SampLib.DPA_165	A	5	74	D5	pp	4	591.33
SampLib.DPA_166	A	5	74	D5	mp	4	591.33
SampLib.DPA_167	A	5	74	D5	mf	4	591.33
SampLib.DPA_168	A	5	74	D5	ff	4	591.33
SampLib.DPA_169	A	6	75	D#5	pp	4	626.5
SampLib.DPA_170	A	6	75	D#5	mp	4	626.5
SampLib.DPA_171	A	6	75	D#5	mf	4	626.5
SampLib.DPA_172	A	6	75	D#5	ff	4	626.5
SampLib.DPA_173	A	7	76	E5	pp	4	663.75
SampLib.DPA_174	A	7	76	E5	mp	4	663.75
SampLib.DPA_175	A	7	76	E5	mf	4	663.75
SampLib.DPA_176	A	7	76	E5	ff	4	663.75
SampLib.DPA_177	A	8	77	F5	pp	4	703.22
SampLib.DPA_178	A	8	77	F5	mp	4	703.22
SampLib.DPA_179	A	8	77	F5	mf	4	703.22
SampLib.DPA_180	A	8	77	F5	ff	4	703.22
SampLib.DPA_181	A	9	78	F#5	pp	4	745.03
SampLib.DPA_182	A	9	78	F#5	mp	4	745.03
SampLib.DPA_183	A	9	78	F#5	mf	4	745.03

SampLib.DPA_184	A	9	78	F#5	ff	4	745.03
SampLib.DPA_185	A	10	79	G5	pp	4	789.34
SampLib.DPA_186	A	10	79	G5	mp	4	789.34
SampLib.DPA_187	A	10	79	G5	mf	4	789.34
SampLib.DPA_188	A	10	79	G5	ff	4	789.34
SampLib.DPA_189	A	11	80	G#5	pp	4	836.27
SampLib.DPA_190	A	11	80	G#5	mp	4	836.27
SampLib.DPA_191	A	11	80	G#5	mf	4	836.27
SampLib.DPA_192	A	11	80	G#5	ff	4	836.27
SampLib.DPA_193	A	12	81	A5	pp	4	886
SampLib.DPA_194	A	12	81	A5	mp	4	886
SampLib.DPA_195	A	12	81	A5	mf	4	886
SampLib.DPA_196	A	12	81	A5	ff	4	886
SampLib.DPA_197	A	13	82	A#5	pp	5	938.68
SampLib.DPA_198	A	13	82	A#5	mp	5	938.68
SampLib.DPA_199	A	13	82	A#5	mf	5	938.68
SampLib.DPA_200	A	13	82	A#5	ff	5	938.68
SampLib.DPA_201	A	14	83	B5	pp	5	994.5
SampLib.DPA_202	A	14	83	B5	mp	5	994.5
SampLib.DPA_203	A	14	83	B5	mf	5	994.5
SampLib.DPA_204	A	14	83	B5	ff	5	994.5
SampLib.DPA_205	A	15	84	C6	pp	5	1053.64
SampLib.DPA_206	A	15	84	C6	mp	5	1053.64
SampLib.DPA_207	A	15	84	C6	mf	5	1053.64
SampLib.DPA_208	A	15	84	C6	ff	5	1053.64
SampLib.DPA_209	A	16	85	C#6	pp	5	1116.29
SampLib.DPA_210	A	16	85	C#6	mp	5	1116.29
SampLib.DPA_211	A	16	85	C#6	mf	5	1116.29
SampLib.DPA_212	A	16	85	C#6	ff	5	1116.29
SampLib.DPA_213	A	17	86	D6	pp	5	1182.67
SampLib.DPA_214	A	17	86	D6	mp	5	1182.67
SampLib.DPA_215	A	17	86	D6	mf	5	1182.67
SampLib.DPA_216	A	17	86	D6	ff	5	1182.67
SampLib.DPA_217	E	0	76	E5	pp	4	663.75
SampLib.DPA_218	E	0	76	E5	mp	4	663.75
SampLib.DPA_219	E	0	76	E5	mf	4	663.75
SampLib.DPA_220	E	0	76	E5	ff	4	663.75
SampLib.DPA_221	E	1	77	F5	pp	5	703.22
SampLib.DPA_222	E	1	77	F5	mp	5	703.22
SampLib.DPA_223	E	1	77	F5	mf	5	703.22
SampLib.DPA_224	E	1	77	F5	ff	5	703.22
SampLib.DPA_225	E	2	78	F#5	pp	5	745.03
SampLib.DPA_226	E	2	78	F#5	mp	5	745.03
SampLib.DPA_227	E	2	78	F#5	mf	5	745.03
SampLib.DPA_228	E	2	78	F#5	ff	5	745.03
SampLib.DPA_229	E	3	79	G5	pp	5	789.34
SampLib.DPA_230	E	3	79	G5	mp	5	789.34
SampLib.DPA_231	E	3	79	G5	mf	5	789.34
SampLib.DPA_232	E	3	79	G5	ff	5	789.34
SampLib.DPA_233	E	4	80	G#5	pp	5	836.27
SampLib.DPA_234	E	4	80	G#5	mp	5	836.27
SampLib.DPA_235	E	4	80	G#5	mf	5	836.27
SampLib.DPA_236	E	4	80	G#5	ff	5	836.27
SampLib.DPA_237	E	5	81	A5	pp	5	886
SampLib.DPA_238	E	5	81	A5	mp	5	886
SampLib.DPA_239	E	5	81	A5	mf	5	886
SampLib.DPA_240	E	5	81	A5	ff	5	886
SampLib.DPA_241	E	6	82	A#5	pp	5	938.68
SampLib.DPA_242	E	6	82	A#5	mp	5	938.68
SampLib.DPA_243	E	6	82	A#5	mf	5	938.68
SampLib.DPA_244	E	6	82	A#5	ff	5	938.68
SampLib.DPA_245	E	7	83	B5	pp	5	994.5

SampLib.DPA_246	E	7	83	B5	mp	5	994.5
SampLib.DPA_247	E	7	83	B5	mf	5	994.5
SampLib.DPA_248	E	7	83	B5	ff	5	994.5
SampLib.DPA_249	E	8	84	C6	pp	5	1053.64
SampLib.DPA_250	E	8	84	C6	mp	5	1053.64
SampLib.DPA_251	E	8	84	C6	mf	5	1053.64
SampLib.DPA_252	E	8	84	C6	ff	5	1053.64
SampLib.DPA_253	E	9	85	C#6	pp	5	1116.29
SampLib.DPA_254	E	9	85	C#6	mp	5	1116.29
SampLib.DPA_255	E	9	85	C#6	mf	5	1116.29
SampLib.DPA_256	E	9	85	C#6	ff	5	1116.29
SampLib.DPA_257	E	10	86	D6	pp	5	1182.67
SampLib.DPA_258	E	10	86	D6	mp	5	1182.67
SampLib.DPA_259	E	10	86	D6	mf	5	1182.67
SampLib.DPA_260	E	10	86	D6	ff	5	1182.67
SampLib.DPA_261	E	11	87	D#6	pp	5	1252.99
SampLib.DPA_262	E	11	87	D#6	mp	5	1252.99
SampLib.DPA_263	E	11	87	D#6	mf	5	1252.99
SampLib.DPA_264	E	11	87	D#6	ff	5	1252.99
SampLib.DPA_265	E	12	88	E6	pp	6	1327.5
SampLib.DPA_266	E	12	88	E6	mp	6	1327.5
SampLib.DPA_267	E	12	88	E6	mf	6	1327.5
SampLib.DPA_268	E	12	88	E6	ff	6	1327.5
SampLib.DPA_269	E	13	89	F6	pp	6	1406.44
SampLib.DPA_270	E	13	89	F6	mp	6	1406.44
SampLib.DPA_271	E	13	89	F6	mf	6	1406.44
SampLib.DPA_272	E	13	89	F6	ff	6	1406.44
SampLib.DPA_273	E	14	90	F#6	pp	6	1490.07
SampLib.DPA_274	E	14	90	F#6	mp	6	1490.07
SampLib.DPA_275	E	14	90	F#6	mf	6	1490.07
SampLib.DPA_276	E	14	90	F#6	ff	6	1490.07
SampLib.DPA_277	E	15	91	G6	pp	6	1578.67
SampLib.DPA_278	E	15	91	G6	mp	6	1578.67
SampLib.DPA_279	E	15	91	G6	mf	6	1578.67
SampLib.DPA_280	E	15	91	G6	ff	6	1578.67
SampLib.DPA_281	E	16	92	G#6	pp	6	1672.55
SampLib.DPA_282	E	16	92	G#6	mp	6	1672.55
SampLib.DPA_283	E	16	92	G#6	mf	6	1672.55
SampLib.DPA_284	E	16	92	G#6	ff	6	1672.55
SampLib.DPA_285	E	17	93	A6	pp	6	1772
SampLib.DPA_286	E	17	93	A6	mp	6	1772
SampLib.DPA_287	E	17	93	A6	mf	6	1772
SampLib.DPA_288	E	17	93	A6	ff	6	1772
SampLib.DPA_289	E	18	94	A#6	pp	6	1877.37
SampLib.DPA_290	E	18	94	A#6	mp	6	1877.37
SampLib.DPA_291	E	18	94	A#6	mf	6	1877.37
SampLib.DPA_292	E	18	94	A#6	ff	6	1877.37
SampLib.DPA_293	E	19	95	B6	pp	6	1989
SampLib.DPA_294	E	19	95	B6	mp	6	1989
SampLib.DPA_295	E	19	95	B6	mf	6	1989
SampLib.DPA_296	E	19	95	B6	ff	6	1989
SampLib.DPA_297	E	20	96	C7	pp	6	2107.28
SampLib.DPA_298	E	20	96	C7	mp	6	2107.28
SampLib.DPA_299	E	20	96	C7	mf	6	2107.28
SampLib.DPA_300	E	20	96	C7	ff	6	2107.28
SampLib.DPA_301	E	21	97	C#7	pp	6	2232.58
SampLib.DPA_302	E	21	97	C#7	mp	6	2232.58
SampLib.DPA_303	E	21	97	C#7	mf	6	2232.58
SampLib.DPA_304	E	21	97	C#7	ff	6	2232.58
SampLib.DPA_305	E	22	98	D7	pp	6	2365.34
SampLib.DPA_306	E	22	98	D7	mp	6	2365.34
SampLib.DPA_307	E	22	98	D7	mf	6	2365.34

SampLib.DPA_308	E	22	98	D7	ff	6	2365.34
SampLib.DPA_309	E	23	99	D#7	pp	7	2505.99
SampLib.DPA_310	E	23	99	D#7	mp	7	2505.99
SampLib.DPA_311	E	23	99	D#7	mf	7	2505.99
SampLib.DPA_312	E	23	99	D#7	ff	7	2505.99
SampLib.DPA_313	E	24	100	E7	pp	7	2655
SampLib.DPA_314	E	24	100	E7	mp	7	2655
SampLib.DPA_315	E	24	100	E7	mf	7	2655
SampLib.DPA_316	E	24	100	E7	ff	7	2655
SampLib.DPA_317	E	25	101	F7	pp	7	2812.87
SampLib.DPA_318	E	25	101	F7	mp	7	2812.87
SampLib.DPA_319	E	25	101	F7	mf	7	2812.87
SampLib.DPA_320	E	25	101	F7	ff	7	2812.87
SampLib.DPA_321	E	26	102	F#7	pp	7	2980.14
SampLib.DPA_322	E	26	102	F#7	mp	7	2980.14
SampLib.DPA_323	E	26	102	F#7	mf	7	2980.14
SampLib.DPA_324	E	26	102	F#7	ff	7	2980.14
SampLib.DPA_325	E	27	103	G7	pp	7	3157.35
SampLib.DPA_326	E	27	103	G7	mp	7	3157.35
SampLib.DPA_327	E	27	103	G7	mf	7	3157.35
SampLib.DPA_328	E	27	103	G7	ff	7	3157.35
SampLib.DPA_329	E	28	104	G#7	pp	7	3345.09
SampLib.DPA_330	E	28	104	G#7	mp	7	3345.09
SampLib.DPA_331	E	28	104	G#7	mf	7	3345.09
SampLib.DPA_332	E	28	104	G#7	ff	7	3345.09
SampLib.DPA_333	E	29	105	A7	pp	7	3544
SampLib.DPA_334	E	29	105	A7	mp	7	3544
SampLib.DPA_335	E	29	105	A7	mf	7	3544
SampLib.DPA_336	E	29	105	A7	ff	7	3544

B. sample-assignment.txt

note	pp	mp	mf	ff
35	SampLib_BuK_01	SampLib_BuK_02	SampLib_BuK_03	SampLib_BuK_04
36	SampLib_BuK_05	SampLib_BuK_06	SampLib_BuK_07	SampLib_BuK_08
37	SampLib_BuK_09	SampLib_BuK_10	SampLib_BuK_11	SampLib_BuK_12
38	SampLib_BuK_13	SampLib_BuK_14	SampLib_BuK_15	SampLib_BuK_16
39	SampLib_BuK_17	SampLib_BuK_18	SampLib_BuK_19	SampLib_BuK_20
40	SampLib_BuK_21	SampLib_BuK_22	SampLib_BuK_23	SampLib_BuK_24
41	SampLib_BuK_25	SampLib_BuK_26	SampLib_BuK_27	SampLib_BuK_28
42	SampLib_BuK_29	SampLib_BuK_30	SampLib_BuK_31	SampLib_BuK_32
43	SampLib_BuK_33	SampLib_BuK_34	SampLib_BuK_35	SampLib_BuK_36
44	SampLib_BuK_37	SampLib_BuK_38	SampLib_BuK_39	SampLib_BuK_40
45	SampLib_BuK_41	SampLib_BuK_42	SampLib_BuK_43	SampLib_BuK_44
46	SampLib_BuK_45	SampLib_BuK_46	SampLib_BuK_47	SampLib_BuK_48
47	SampLib_BuK_49	SampLib_BuK_50	SampLib_BuK_51	SampLib_BuK_52
48	SampLib_BuK_53	SampLib_BuK_54	SampLib_BuK_55	SampLib_BuK_56
49	SampLib_BuK_57	SampLib_BuK_58	SampLib_BuK_59	SampLib_BuK_60
50	SampLib_BuK_61	SampLib_BuK_62	SampLib_BuK_63	SampLib_BuK_64
51	SampLib_BuK_65	SampLib_BuK_66	SampLib_BuK_67	SampLib_BuK_68
52	SampLib_BuK_69	SampLib_BuK_70	SampLib_BuK_71	SampLib_BuK_72
53	SampLib_BuK_73	SampLib_BuK_74	SampLib_BuK_75	SampLib_BuK_76
54	SampLib_BuK_77	SampLib_BuK_78	SampLib_BuK_79	SampLib_BuK_80
55	SampLib_BuK_81	SampLib_BuK_82	SampLib_BuK_83	SampLib_BuK_84
56	SampLib_BuK_85	SampLib_BuK_86	SampLib_BuK_87	SampLib_BuK_88
57	SampLib_BuK_89	SampLib_BuK_90	SampLib_BuK_91	SampLib_BuK_92
58	SampLib_BuK_93	SampLib_BuK_94	SampLib_BuK_95	SampLib_BuK_96
59	SampLib_BuK_97	SampLib_BuK_98	SampLib_BuK_99	SampLib_BuK_100
60	SampLib_BuK_101	SampLib_BuK_102	SampLib_BuK_103	SampLib_BuK_104
61	SampLib_BuK_105	SampLib_BuK_106	SampLib_BuK_107	SampLib_BuK_108
62	SampLib_BuK_109	SampLib_BuK_110	SampLib_BuK_111	SampLib_BuK_112
63	SampLib_BuK_113	SampLib_BuK_114	SampLib_BuK_115	SampLib_BuK_116
64	SampLib_BuK_117	SampLib_BuK_118	SampLib_BuK_119	SampLib_BuK_120
65	SampLib_BuK_121	SampLib_BuK_122	SampLib_BuK_123	SampLib_BuK_124
66	SampLib_BuK_125	SampLib_BuK_126	SampLib_BuK_127	SampLib_BuK_128
67	SampLib_BuK_129	SampLib_BuK_130	SampLib_BuK_131	SampLib_BuK_132
68	SampLib_BuK_133	SampLib_BuK_134	SampLib_BuK_135	SampLib_BuK_136
69	SampLib_BuK_137	SampLib_BuK_138	SampLib_BuK_139	SampLib_BuK_140
70	SampLib_BuK_141	SampLib_BuK_142	SampLib_BuK_143	SampLib_BuK_144
71	SampLib_BuK_145	SampLib_BuK_146	SampLib_BuK_147	SampLib_BuK_148
72	SampLib_BuK_149	SampLib_BuK_150	SampLib_BuK_151	SampLib_BuK_152
73	SampLib_BuK_153	SampLib_BuK_154	SampLib_BuK_155	SampLib_BuK_156
74	SampLib_BuK_157	SampLib_BuK_158	SampLib_BuK_159	SampLib_BuK_160
75	SampLib_BuK_161	SampLib_BuK_162	SampLib_BuK_163	SampLib_BuK_164
76	SampLib_BuK_165	SampLib_BuK_166	SampLib_BuK_167	SampLib_BuK_168
77	SampLib_BuK_169	SampLib_BuK_170	SampLib_BuK_171	SampLib_BuK_172
78	SampLib_BuK_173	SampLib_BuK_174	SampLib_BuK_175	SampLib_BuK_176
79	SampLib_BuK_177	SampLib_BuK_178	SampLib_BuK_179	SampLib_BuK_180
80	SampLib_BuK_181	SampLib_BuK_182	SampLib_BuK_183	SampLib_BuK_184
81	SampLib_BuK_185	SampLib_BuK_186	SampLib_BuK_187	SampLib_BuK_188
82	SampLib_BuK_189	SampLib_BuK_190	SampLib_BuK_191	SampLib_BuK_192
83	SampLib_BuK_193	SampLib_BuK_194	SampLib_BuK_195	SampLib_BuK_196
84	SampLib_BuK_197	SampLib_BuK_198	SampLib_BuK_199	SampLib_BuK_200
85	SampLib_BuK_201	SampLib_BuK_202	SampLib_BuK_203	SampLib_BuK_204
86	SampLib_BuK_205	SampLib_BuK_206	SampLib_BuK_207	SampLib_BuK_208
87	SampLib_BuK_209	SampLib_BuK_210	SampLib_BuK_211	SampLib_BuK_212
88	SampLib_BuK_213	SampLib_BuK_214	SampLib_BuK_215	SampLib_BuK_216
89	SampLib_BuK_217	SampLib_BuK_218	SampLib_BuK_219	SampLib_BuK_220
90	SampLib_BuK_221	SampLib_BuK_222	SampLib_BuK_223	SampLib_BuK_224
91	SampLib_BuK_225	SampLib_BuK_226	SampLib_BuK_227	SampLib_BuK_228
92	SampLib_BuK_229	SampLib_BuK_230	SampLib_BuK_231	SampLib_BuK_232
93	SampLib_BuK_233	SampLib_BuK_234	SampLib_BuK_235	SampLib_BuK_236
94	SampLib_BuK_237	SampLib_BuK_238	SampLib_BuK_239	SampLib_BuK_240

95	Samplib_BuK_241	Samplib.BuK.242	Samplib_BuK_243	Samplib.BuK.244
96	Samplib_BuK_245	Samplib.BuK.246	Samplib_BuK_247	Samplib.BuK.248
97	Samplib_BuK_249	Samplib.BuK.250	Samplib_BuK_251	Samplib.BuK.252
98	Samplib_BuK_253	Samplib.BuK.254	Samplib_BuK_255	Samplib.BuK.256
99	Samplib_BuK_257	Samplib.BuK.258	Samplib_BuK_259	Samplib.BuK.260
100	Samplib_BuK_261	Samplib.BuK.262	Samplib_BuK_263	Samplib.BuK.264
101	Samplib_BuK_265	Samplib.BuK.266	Samplib_BuK_267	Samplib.BuK.268
102	Samplib_BuK_269	Samplib.BuK.270	Samplib_BuK_271	Samplib.BuK.272
103	Samplib_BuK_273	Samplib.BuK.274	Samplib_BuK_275	Samplib.BuK.276
104	Samplib_BuK_277	Samplib.BuK.278	Samplib_BuK_279	Samplib.BuK.280
105	Samplib_BuK_281	Samplib.BuK.282	Samplib_BuK_283	Samplib.BuK.284
106	Samplib_BuK_285	Samplib.BuK.286	Samplib_BuK_287	Samplib.BuK.288
107	Samplib_BuK_289	Samplib.BuK.290	Samplib_BuK_291	Samplib.BuK.292
108	Samplib_BuK_293	Samplib.BuK.294	Samplib_BuK_295	Samplib.BuK.296
109	Samplib_BuK_297	Samplib.BuK.298	Samplib_BuK_299	Samplib.BuK.300
110	Samplib_BuK_301	Samplib.BuK.302	Samplib_BuK_303	Samplib.BuK.304
111	Samplib_BuK_305	Samplib.BuK.306	Samplib_BuK_307	Samplib.BuK.308
112	Samplib_BuK_309	Samplib.BuK.310	Samplib_BuK_311	Samplib.BuK.312
113	Samplib_BuK_313	Samplib.BuK.314	Samplib_BuK_315	Samplib.BuK.316
114	Samplib_BuK_317	Samplib.BuK.318	Samplib_BuK_319	Samplib.BuK.320
115	Samplib_BuK_321	Samplib.BuK.322	Samplib_BuK_323	Samplib.BuK.324
116	Samplib_BuK_325	Samplib.BuK.326	Samplib_BuK_327	Samplib.BuK.328
117	Samplib_BuK_329	Samplib.BuK.330	Samplib_BuK_331	Samplib.BuK.332
118	Samplib_BuK_333	Samplib.BuK.334	Samplib_BuK_335	Samplib.BuK.336

C. list_TwoNote.txt

ID	N1	POS1	STR1	N2	POS2	STR2	SEMI	DIR	DYN	ART	VIB
1	D4	7	G	A3	2	G	5	down	mp	detached	false
2	A3	7	G	D4	2	G	5	up	mp	detached	false
3	D4	7	G	A3	2	G	5	down	ff	detached	false
4	A3	7	G	D4	2	G	5	up	ff	detached	false
5	D4	7	G	A3	2	G	5	down	mp	detached	true
6	A3	7	G	D4	2	G	5	up	mp	detached	true
7	D4	7	G	A3	2	G	5	down	ff	detached	true
8	A3	7	G	D4	2	G	5	up	ff	detached	true
9	D4	7	G	A3	2	G	5	down	mp	legato	false
10	A3	7	G	D4	2	G	5	up	mp	legato	false
11	D4	7	G	A3	2	G	5	down	ff	legato	false
12	A3	7	G	D4	2	G	5	up	ff	legato	false
13	D4	7	G	A3	2	G	5	down	mp	legato	true
14	A3	7	G	D4	2	G	5	up	mp	legato	true
15	D4	7	G	A3	2	G	5	down	ff	legato	true
16	A3	7	G	D4	2	G	5	up	ff	legato	true
17	D4	7	G	A3	2	G	5	down	mp	glissando	false
18	A3	7	G	D4	2	G	5	up	mp	glissando	false
19	D4	7	G	A3	2	G	5	down	ff	glissando	false
20	A3	7	G	D4	2	G	5	up	ff	glissando	false
21	D4	7	G	A3	2	G	5	down	mp	glissando	true
22	A3	7	G	D4	2	G	5	up	mp	glissando	true
23	D4	7	G	A3	2	G	5	down	ff	glissando	true
24	A3	7	G	D4	2	G	5	up	ff	glissando	true
25	A4	7	D	E4	2	D	5	down	mp	detached	false
26	E4	7	D	A4	2	D	5	up	mp	detached	false
27	A4	7	D	E4	2	D	5	down	ff	detached	false
28	E4	7	D	A4	2	D	5	up	ff	detached	false
29	A4	7	D	E4	2	D	5	down	mp	detached	true
30	E4	7	D	A4	2	D	5	up	mp	detached	true
31	A4	7	D	E4	2	D	5	down	ff	detached	true
32	E4	7	D	A4	2	D	5	up	ff	detached	true
33	A4	7	D	E4	2	D	5	down	mp	legato	false
34	E4	7	D	A4	2	D	5	up	mp	legato	false
35	A4	7	D	E4	2	D	5	down	ff	legato	false
36	E4	7	D	A4	2	D	5	up	ff	legato	false
37	A4	7	D	E4	2	D	5	down	mp	legato	true
38	E4	7	D	A4	2	D	5	up	mp	legato	true
39	A4	7	D	E4	2	D	5	down	ff	legato	true
40	E4	7	D	A4	2	D	5	up	ff	legato	true
41	A4	7	D	E4	2	D	5	down	mp	glissando	false
42	E4	7	D	A4	2	D	5	up	mp	glissando	false
43	A4	7	D	E4	2	D	5	down	ff	glissando	false
44	E4	7	D	A4	2	D	5	up	ff	glissando	false
45	A4	7	D	E4	2	D	5	down	mp	glissando	true
46	E4	7	D	A4	2	D	5	up	mp	glissando	true
47	A4	7	D	E4	2	D	5	down	ff	glissando	true
48	E4	7	D	A4	2	D	5	up	ff	glissando	true
49	E5	7	A	B4	2	A	5	down	mp	detached	false
50	B4	7	A	E5	2	A	5	up	mp	detached	false
51	E5	7	A	B4	2	A	5	down	ff	detached	false
52	B4	7	A	E5	2	A	5	up	ff	detached	false
53	E5	7	A	B4	2	A	5	down	mp	detached	true
54	B4	7	A	E5	2	A	5	up	mp	detached	true
55	E5	7	A	B4	2	A	5	down	ff	detached	true
56	B4	7	A	E5	2	A	5	up	ff	detached	true
57	E5	7	A	B4	2	A	5	down	mp	legato	false
58	B4	7	A	E5	2	A	5	up	mp	legato	false
59	E5	7	A	B4	2	A	5	down	ff	legato	false

60	B4	7	A	E5	2	A	5	up	ff	legato	false
61	E5	7	A	B4	2	A	5	down	mp	legato	true
62	B4	7	A	E5	2	A	5	up	mp	legato	true
63	E5	7	A	B4	2	A	5	down	ff	legato	true
64	B4	7	A	E5	2	A	5	up	ff	legato	true
65	E5	7	A	B4	2	A	5	down	mp	glissando	false
66	B4	7	A	E5	2	A	5	up	mp	glissando	false
67	E5	7	A	B4	2	A	5	down	ff	glissando	false
68	B4	7	A	E5	2	A	5	up	ff	glissando	false
69	E5	7	A	B4	2	A	5	down	mp	glissando	true
70	B4	7	A	E5	2	A	5	up	mp	glissando	true
71	E5	7	A	B4	2	A	5	down	ff	glissando	true
72	B4	7	A	E5	2	A	5	up	ff	glissando	true
73	B5	7	E	F#5	2	E	5	down	mp	detached	false
74	F#5	7	E	B5	2	E	5	up	mp	detached	false
75	B5	7	E	F#5	2	E	5	down	ff	detached	false
76	F#5	7	E	B5	2	E	5	up	ff	detached	false
77	B5	7	E	F#5	2	E	5	down	mp	detached	true
78	F#5	7	E	B5	2	E	5	up	mp	detached	true
79	B5	7	E	F#5	2	E	5	down	ff	detached	true
80	F#5	7	E	B5	2	E	5	up	ff	detached	true
81	B5	7	E	F#5	2	E	5	down	mp	legato	false
82	F#5	7	E	B5	2	E	5	up	mp	legato	false
83	B5	7	E	F#5	2	E	5	down	ff	legato	false
84	F#5	7	E	B5	2	E	5	up	ff	legato	false
85	B5	7	E	F#5	2	E	5	down	mp	legato	true
86	F#5	7	E	B5	2	E	5	up	mp	legato	true
87	B5	7	E	F#5	2	E	5	down	ff	legato	true
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89	B5	7	E	F#5	2	E	5	down	mp	glissando	false
90	F#5	7	E	B5	2	E	5	up	mp	glissando	false
91	B5	7	E	F#5	2	E	5	down	ff	glissando	false
92	F#5	7	E	B5	2	E	5	up	ff	glissando	false
93	B5	7	E	F#5	2	E	5	down	mp	glissando	true
94	F#5	7	E	B5	2	E	5	up	mp	glissando	true
95	B5	7	E	F#5	2	E	5	down	ff	glissando	true
96	F#5	7	E	B5	2	E	5	up	ff	glissando	true
97	D4	7	G	G4	12	G	5	up	mp	detached	false
98	G4	7	G	D4	12	G	5	down	mp	detached	false
99	D4	7	G	G4	12	G	5	up	ff	detached	false
100	G4	7	G	D4	12	G	5	down	ff	detached	false
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102	G4	7	G	D4	12	G	5	down	mp	detached	true
103	D4	7	G	G4	12	G	5	up	ff	detached	true
104	G4	7	G	D4	12	G	5	down	ff	detached	true
105	D4	7	G	G4	12	G	5	up	mp	legato	false
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107	D4	7	G	G4	12	G	5	up	ff	legato	false
108	G4	7	G	D4	12	G	5	down	ff	legato	false
109	D4	7	G	G4	12	G	5	up	mp	legato	true
110	G4	7	G	D4	12	G	5	down	mp	legato	true
111	D4	7	G	G4	12	G	5	up	ff	legato	true
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113	D4	7	G	G4	12	G	5	up	mp	glissando	false
114	G4	7	G	D4	12	G	5	down	mp	glissando	false
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116	G4	7	G	D4	12	G	5	down	ff	glissando	false
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118	G4	7	G	D4	12	G	5	down	mp	glissando	true
119	D4	7	G	G4	12	G	5	up	ff	glissando	true
120	G4	7	G	D4	12	G	5	down	ff	glissando	true
121	A4	7	D	D5	12	D	5	up	mp	detached	false

122	D5	7	D	A4	12	D	5	down	mp	detached	false
123	A4	7	D	D5	12	D	5	up	ff	detached	false
124	D5	7	D	A4	12	D	5	down	ff	detached	false
125	A4	7	D	D5	12	D	5	up	mp	detached	true
126	D5	7	D	A4	12	D	5	down	mp	detached	true
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128	D5	7	D	A4	12	D	5	down	ff	detached	true
129	A4	7	D	D5	12	D	5	up	mp	legato	false
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132	D5	7	D	A4	12	D	5	down	ff	legato	false
133	A4	7	D	D5	12	D	5	up	mp	legato	true
134	D5	7	D	A4	12	D	5	down	mp	legato	true
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136	D5	7	D	A4	12	D	5	down	ff	legato	true
137	A4	7	D	D5	12	D	5	up	mp	glissando	false
138	D5	7	D	A4	12	D	5	down	mp	glissando	false
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140	D5	7	D	A4	12	D	5	down	ff	glissando	false
141	A4	7	D	D5	12	D	5	up	mp	glissando	true
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143	A4	7	D	D5	12	D	5	up	ff	glissando	true
144	D5	7	D	A4	12	D	5	down	ff	glissando	true
145	E5	7	A	A5	12	A	5	up	mp	detached	false
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147	E5	7	A	A5	12	A	5	up	ff	detached	false
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153	E5	7	A	A5	12	A	5	up	mp	legato	false
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155	E5	7	A	A5	12	A	5	up	ff	legato	false
156	A5	7	A	E5	12	A	5	down	ff	legato	false
157	E5	7	A	A5	12	A	5	up	mp	legato	true
158	A5	7	A	E5	12	A	5	down	mp	legato	true
159	E5	7	A	A5	12	A	5	up	ff	legato	true
160	A5	7	A	E5	12	A	5	down	ff	legato	true
161	E5	7	A	A5	12	A	5	up	mp	glissando	false
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163	E5	7	A	A5	12	A	5	up	ff	glissando	false
164	A5	7	A	E5	12	A	5	down	ff	glissando	false
165	E5	7	A	A5	12	A	5	up	mp	glissando	true
166	A5	7	A	E5	12	A	5	down	mp	glissando	true
167	E5	7	A	A5	12	A	5	up	ff	glissando	true
168	A5	7	A	E5	12	A	5	down	ff	glissando	true
169	B5	7	E	E6	12	E	5	up	mp	detached	false
170	E6	7	E	B5	12	E	5	down	mp	detached	false
171	B5	7	E	E6	12	E	5	up	ff	detached	false
172	E6	7	E	B5	12	E	5	down	ff	detached	false
173	B5	7	E	E6	12	E	5	up	mp	detached	true
174	E6	7	E	B5	7	E	5	down	mp	detached	true
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176	E6	7	E	B5	12	E	5	down	ff	detached	true
177	B5	7	E	E6	12	E	5	up	mp	legato	false
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179	B5	7	E	E6	12	E	5	up	ff	legato	false
180	E6	7	E	B5	12	E	5	down	ff	legato	false
181	B5	7	E	E6	12	E	5	up	mp	legato	true
182	E6	7	E	B5	12	E	5	down	mp	legato	true
183	B5	7	E	E6	12	E	5	up	ff	legato	true

184	E6	7	E	B5	12	E	5	down	ff	legato	true
185	B5	7	E	E6	12	E	5	up	mp	glissando	false
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187	B5	7	E	E6	12	E	5	up	ff	glissando	false
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189	B5	7	E	E6	12	E	5	up	mp	glissando	true
190	E6	7	E	B5	12	E	5	down	mp	glissando	true
191	B5	7	E	E6	12	E	5	up	ff	glissando	true
192	E6	7	E	B5	12	E	5	down	ff	glissando	true
193	D4	7	G	D4	7	G	0	down	mp	detached	false
194	D4	7	G	D4	7	G	0	down	ff	detached	false
195	D4	7	G	D4	7	G	0	down	mp	detached	true
196	D4	7	G	D4	7	G	0	down	ff	detached	true
197	D4	7	G	D4	7	G	0	down	mp	legato	false
198	D4	7	G	D4	7	G	0	down	ff	legato	false
199	A4	7	D	A4	7	D	0	down	mp	detached	false
200	A4	7	D	A4	7	D	0	down	ff	detached	false
201	A4	7	D	A4	7	D	0	down	mp	detached	true
202	A4	7	D	A4	7	D	0	down	ff	detached	true
203	A4	7	D	A4	7	D	0	down	mp	legato	false
204	A4	7	D	A4	7	D	0	down	ff	legato	false
205	E5	7	A	E5	7	A	0	down	mp	detached	false
206	E5	7	A	E5	7	A	0	down	ff	detached	false
207	E5	7	A	E5	7	A	0	down	mp	detached	true
208	E5	7	A	E5	7	A	0	down	ff	detached	true
209	E5	7	A	E5	7	A	0	down	mp	legato	false
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211	B5	7	E	B5	7	E	0	down	mp	detached	false
212	B5	7	E	B5	7	E	0	down	ff	detached	false
213	B5	7	E	B5	7	E	0	down	mp	detached	true
214	B5	7	E	B5	7	E	0	down	ff	detached	true
215	B5	7	E	B5	7	E	0	down	mp	legato	false
216	B5	7	E	B5	7	E	0	down	ff	legato	false
217	D4	7	G	G3	0	G	7	down	mp	detached	false
218	G3	7	G	D4	0	G	7	up	mp	detached	false
219	D4	7	G	G3	0	G	7	down	ff	detached	false
220	G3	7	G	D4	0	G	7	up	ff	detached	false
221	D4	7	G	G3	0	G	7	down	mp	legato	false
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223	D4	7	G	G3	0	G	7	down	ff	legato	false
224	G3	7	G	D4	0	G	7	up	ff	legato	false
225	D4	7	G	G3	0	G	7	down	mp	legato	true
226	G3	7	G	D4	0	G	7	up	mp	legato	true
227	D4	7	G	G3	0	G	7	down	ff	legato	true
228	G3	7	G	D4	0	G	7	up	ff	legato	true
229	D4	7	G	G3	0	G	7	down	mp	glissando	false
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231	D4	7	G	G3	0	G	7	down	ff	glissando	false
232	G3	7	G	D4	0	G	7	up	ff	glissando	false
233	D4	7	G	G3	0	G	7	down	mp	glissando	true
234	G3	7	G	D4	0	G	7	up	mp	glissando	true
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236	G3	7	G	D4	0	G	7	up	ff	glissando	true
237	A4	7	D	D4	0	D	7	down	mp	detached	false
238	D4	7	D	A4	0	D	7	up	mp	detached	false
239	A4	7	D	D4	0	D	7	down	ff	detached	false
240	D4	7	D	A4	0	D	7	up	ff	detached	false
241	A4	7	D	D4	0	D	7	down	mp	legato	false
242	D4	7	D	A4	0	D	7	up	mp	legato	false
243	A4	7	D	D4	0	D	7	down	ff	legato	false
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245	A4	7	D	D4	0	D	7	down	mp	legato	true

246	D4	7	D	A4	0	D	7	up	mp	legato	true
247	A4	7	D	D4	0	D	7	down	ff	legato	true
248	D4	7	D	A4	0	D	7	up	ff	legato	true
249	A4	7	D	D4	0	D	7	down	mp	glissando	false
250	D4	7	D	A4	0	D	7	up	mp	glissando	false
251	A4	7	D	D4	0	D	7	down	ff	glissando	false
252	D4	7	D	A4	0	D	7	up	ff	glissando	false
253	A4	7	D	D4	0	D	7	down	mp	glissando	true
254	D4	7	D	A4	0	D	7	up	mp	glissando	true
255	A4	7	D	D4	0	D	7	down	ff	glissando	true
256	D4	7	D	A4	0	D	7	up	ff	glissando	true
257	E5	7	A	A4	0	A	7	down	mp	detached	false
258	A4	7	A	E5	0	A	7	up	mp	detached	false
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260	A4	7	A	E5	0	A	7	up	ff	detached	false
261	E5	7	A	A4	0	A	7	down	mp	legato	false
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263	E5	7	A	A4	0	A	7	down	ff	legato	false
264	A4	7	A	E5	0	A	7	up	ff	legato	false
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266	A4	7	A	E5	0	A	7	up	mp	legato	true
267	E5	7	A	A4	0	A	7	down	ff	legato	true
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269	E5	7	A	A4	0	A	7	down	mp	glissando	false
270	A4	7	A	E5	0	A	7	up	mp	glissando	false
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272	A4	7	A	E5	0	A	7	up	ff	glissando	false
273	E5	7	A	A4	0	A	7	down	mp	glissando	true
274	A4	7	A	E5	0	A	7	up	mp	glissando	true
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276	A4	7	A	E5	0	A	7	up	ff	glissando	true
277	B5	7	E	E5	0	E	7	down	mp	detached	false
278	E5	7	E	B5	0	E	7	up	mp	detached	false
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281	B5	7	E	E5	0	E	7	down	mp	legato	false
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283	B5	7	E	E5	0	E	7	down	ff	legato	false
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285	B5	7	E	E5	0	E	7	down	mp	legato	true
286	E5	7	E	B5	0	E	7	up	mp	legato	true
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289	B5	7	E	E5	0	E	7	down	mp	glissando	false
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293	B5	7	E	E5	0	E	7	down	mp	glissando	true
294	E5	7	E	B5	0	E	7	up	mp	glissando	true
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296	E5	7	E	B5	0	E	7	up	ff	glissando	true
297	D4	7	G	A4	7	D	7	up	mp	detached	false
298	A4	7	G	D4	7	D	7	down	mp	detached	false
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300	A4	7	G	D4	7	D	7	down	ff	detached	false
301	D4	7	G	A4	7	D	7	up	mp	detached	true
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303	D4	7	G	A4	7	D	7	up	ff	detached	true
304	A4	7	G	D4	7	D	7	down	ff	detached	true
305	D4	7	G	A4	7	D	7	up	mp	legato	false
306	A4	7	G	D4	7	D	7	down	mp	legato	false
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308	A4	7	G	D4	7	D	7	down	ff	legato	false
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311	D4	7	G	A4	7	D	7	up	ff	legato	true
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315	A4	7	D	E5	7	A	7	up	ff	detached	false
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321	A4	7	D	E5	7	A	7	up	mp	legato	false
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325	A4	7	D	E5	7	A	7	up	mp	legato	true
326	E5	7	D	A4	7	A	7	down	mp	legato	true
327	A4	7	D	E5	7	A	7	up	ff	legato	true
328	E5	7	D	A4	7	A	7	down	ff	legato	true
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341	E5	7	A	B5	7	E	7	up	mp	legato	true
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343	E5	7	A	B5	7	E	7	up	ff	legato	true
344	B5	7	A	E5	7	E	7	down	ff	legato	true